

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

DANILO PORRO
MICHAEL SAUER

Serial No.: 09/630,983

Filed: August 2, 2000

For: ASCORBIC ACID PRODUCTION
FROM YEAST

Group Art Unit: Unknown

Examiner: Unknown

Attorney Docket: 2028.594000/RFE
2005940

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

CERTIFICATE OF MAILING (37 C.F.R. § 1.8)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington D.C., 20231, on the date below.

September 7, 2000

Cynde Meinhardt
Cynde Meinhardt

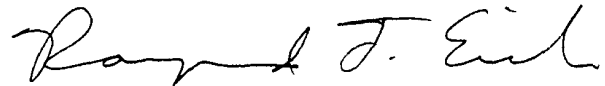
In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. §§ 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement; however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Assistant Commissioner is hereby authorized to deduct said fees from Williams, Morgan & Amerson, P.C., Deposit Account No. 50-0786/2028.594000RFE.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Raymund F. Eich". The signature is fluid and cursive, with the first name "Raymund" being more prominent than the last name "Eich".

Raymund F. Eich
Reg. No. 42,508

AGENT FOR APPLICANTS

WILLIAMS, MORGAN & AMERSON, P.C.
7676 Hillmont, Suite 250
Houston, Texas 77040
(713) 934-4065
(713) 934-7011 (fax)

September 7, 2000

Form PTO-1449 (modified)		Atty. Docket No. 2027.594096/RFE	Prior Serial No. 09/630,983
List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicants Danilo Porro/Michael Sauer	
		Prior Filing Date: August 2, 2000	Prior Group: 1636
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1</i>	

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A1	4,916,068	04/10/90	Roland et al.	435	138	06/18/85
	A2	4,595,659	06/17/86	Roland et al.	435	135	10/20/83
	A3						
	A4						
	A5						

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1	WO99/64618	12/16/99	PCT			
	B2	WO99/33995	07/08/99	PCT			
	B3	WO00/34502	06/15/00	PCT			
	B4	WO85/01745	04/25/85	PCT			

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C1	Koshizaka et al., <i>J. Biol. Chem.</i> 263:1619-1621 (1998)
	C2	Huh et al., <i>Mol. Microb.</i> 30:895-903 (1998)
	C3	Huh et al., <i>Eur. J. Biochem.</i> 225:1073-1079 (1994)
	C4	Kim et al., <i>Biochim. Biophys. Acta</i> 1297:1-8 (1996)
	C5	Kim et al., <i>Biochim. Biophys. Acta</i> 1429:29-39 (1998)
	C6	Dumbrava et al., <i>Biochim. Biophys. Acta</i> 926:331-338 (1987)
	C7	Nick et al., <i>Plant Science</i> 46:181-187 (1986)
	C8	Lee et al., <i>App. Env. Microb.</i> 65:4685-4687 (1999)

EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Form PTO-1449 (modified)		Atty. Docket No. 2027.594096/RFE	Prior Serial No. 09/630,983
List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicants Danilo Porro/Michael Sauer	
		Prior Filing Date: August 2, 2000	Prior Group: 1636
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1</i>	

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C9	Østergaard et al., <i>J. Biol. Chem.</i> 272:30009-30016 (1997)
	C10	Hancock et al., <i>FEMS Microbiol. Lett.</i> 186:245-250 (2000)
	C11	Spickett et al., <i>Free Rad. Biol. Med.</i> 28:183-192 (2000)
	C12	Daruwala et al., <i>FEBS Lett.</i> 460:480-484 (1999)
	C13	
	C14	

EXAMINER:**DATE CONSIDERED:**

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

DANILO PORRO
MICHAEL SAUER

Serial No.: 09/630,983

Filed: August 2, 2000

For: ASCORBIC ACID PRODUCTION FROM
YEAST

Group Art Unit: 1636

Examiner: K. Davis

Attorney Docket: 2027.594000/RFE
(2005940)

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

CERTIFICATE OF MAILING (37 C.F.R. § 1.8)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington D.C., 20231, on the date below.

May 1, 2002

Cynde Meinhart
Cynde Meinhart

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the document listed on attached Form PTO-1449 be considered by the Examiner and made of record. A copy of the listed document required by 37 C.F.R. § 1.98(a)(2) is enclosed for the convenience of the Examiner.

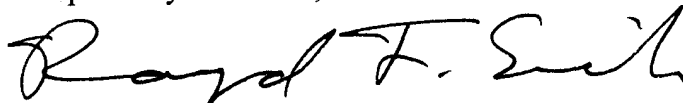
In accordance with 37 C.F.R §§ 1.97(g),(h), this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be

construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

In accordance with 37 C.F.R. § 1.97(e)(1), Applicants hereby certify that the item of information contained in this Supplemental Information Disclosure Statement (WO98/50558) was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the present statement, as evidenced by the date of the enclosed search report. Please note that two items in the search report were previously cited and copies of those references are not enclosed with the present disclosure statement.

Applicants respectfully request that the listed document be made of record in the present case.

Respectfully submitted,



Raymund F. Eich
Reg. No. 42,508

AGENT FOR APPLICANTS

WILLIAMS, MORGAN & AMERSON, P.C.
7676 Hillmont, Suite 250
Houston, Texas 77040
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(713) 934-7011 (fax)

May 1, 2002

Form PTO-1449 (modified)	Atty. Docket No. 2027.594000/RFE	Serial No. 09/630,983
List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Applicants Danilo Porro/Michael Sauer	
	Filing Date: August 2, 2000	Group: 1636
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1</i>

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A3						
	A4						
	A5						

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B5	WO98/50558	11/12/1998	PCT			yes
	B6						
	B7						

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C13	PCT/GB01/03485 Partial Search and Invitation to Pay Additional Fees (April 8, 2002)
	C14	
	C15	

EXAMINER:

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

DANILO PORRO
MICHAEL SAUER

Serial No.: 09/630,983

Filed: August 2, 2000

For: ASCORBIC ACID PRODUCTION FROM
YEAST

Group Art Unit: 1636

Examiner: Katharine F. Davis

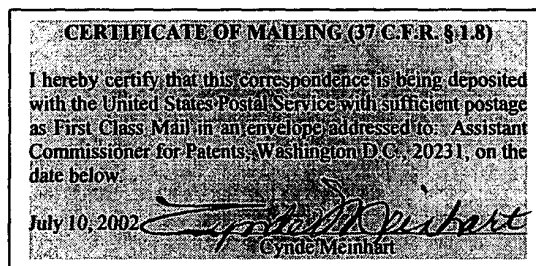
Attorney Docket: 2027.594000/RFE
(2005940)

**SECOND SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:



In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Second Supplemental Information Disclosure Statement be entered and the document listed on attached Form PTO-1449 be considered by the Examiner and made of record. A copy of the listed document required by 37 C.F.R. § 1.98(a)(2) is enclosed for the convenience of the Examiner.

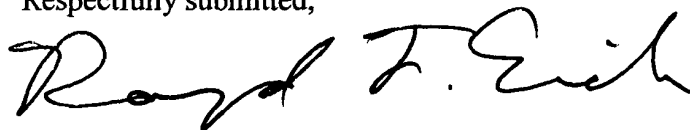
In accordance with 37 C.F.R. §§ 1.97(g),(h), this Second Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made, and

is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

In accordance with 37 C.F.R. § 1.97(e)(2), Applicants hereby certify that no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in Sec. 1.56(c) more than three months prior to the filing of the present information disclosure statement.

Applicants respectfully request that the listed document be made of record in the present case.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Raymund F. Eich". The signature is fluid and cursive, with the first name "Raymund" being more prominent than the last name "Eich".

Raymund F. Eich
Reg. No. 42,508

AGENT FOR APPLICANTS

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July 10, 2002

Form PTO-1449 (modified)		Atty. Docket No. 2027.594000/RFE	Serial No. 09/630,983
List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicants Danilo Porro/Michael Sauer	
		Filing Date: August 2, 2000	Group: 1636
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1</i>	

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A3						
	A4						
	A5						

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B6						
	B7						
	B8						

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C14	U.S. Patent Application Publication No. 2002/0076771 (published June 20, 2002)
	C15	
	C16	

EXAMINER:

DATE CONSIDERED:

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

DANILO PORRO
MICHAEL SAUER

Serial No.: 09/630,983

Filed: August 2, 2000

For: ASCORBIC ACID PRODUCTION
FROM YEAST

Group Art Unit: 1636

Examiner: Katharine F. Davis

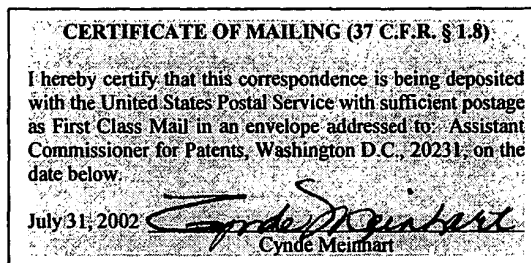
Attorney Docket: 2027.594000/RFE
(2005940)

**THIRD SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:



In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Third Supplemental Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. §§ 1.97(g),(h), this Third Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made, and

is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

In accordance with 37 C.F.R. § 1.97(e)(1), Applicants hereby certify that each item of information contained in this Third Supplemental Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the present statement, as evidenced by the date of the enclosed search report.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,



Raymund F. Eich
Reg. No. 42,508

AGENT FOR APPLICANTS

WILLIAMS, MORGAN & AMERSON, P.C.
7676 Hillmont, Suite 250
Houston, Texas 77040
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(713) 934-7011 (fax)

July 31, 2002

Form PTO-1449 (modified)		Atty. Docket No. 2027.594000/RFE	Serial No. 09/630,983
List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicants Danilo Porro/Michael Sauer	
		Filing Date: August 2, 2000	Group: 1636
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1</i>	

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A3						
	A4						
	A5						

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B6	WO00/34502	06/15/2000	PCT			Yes
	B7	WO99/64618	12/16/1999	PCT			Yes
	B8	WO99/33995	07/08/1999	PCT			Yes
	B9	WO98/50558	11/12/1998	PCT			Yes

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C15	PCT/GB01/03485 International Search Report (July 12, 2002)
	C16	Hancock et al., "Biosynthesis of L-Ascorbic Acid (Vitamin C) by <i>Saccharomyces cerevisiae</i> ," <i>FEMS Microbiology Letters</i> 186:245-250 (2000)
	C17	Onofri et al., "Influence of L-Galactonic Acid γ -Lactone on Ascorbate Production in Some Yeasts," <i>Antonie van Leeuwenhoek</i> 71:227-280 (1997)
	C18	Lee et al., "Bacterial Production of D-Erythroascorbic Acid and L-Ascorbic Acid through Functional Expression of <i>Saccharomyces cerevisiae</i> D-Arabinono-1,4-Lactone Oxidase in <i>Escherichia coli</i> ," <i>Applied and Environmental Microbiology</i> 65:4685-4687 (1999)
	C19	Huh et al., "D-Erythroascorbic Acid is an Important Antioxidant Molecule in <i>Saccharomyces cerevisiae</i> ," <i>Molecular Microbiology</i> 30(4):895-903 (1998)
	C20	Kim et al., "D-Arabinose Dehydrogenase and its Gene from <i>Saccharomyces cerevisiae</i> ," <i>Biochimica et Biophysica Acta</i> 1429:29-39 (1998)

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		Filing Date: August 2, 2000	Group: 1636
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1</i>	

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C21	Krasnov et al., "Expression of Rat Gene for $\text{L-Gulonono-}\gamma\text{-Lactone Oxidase}$, the Key Enzyme of L-Ascorbic Acid Biosynthesis, in Guinea Pig Cells and in Teleost Fish Rainbow Trout (<i>Oncorhynchus mykiss</i>)," <i>Biochimica et Biophysica Acta</i> 1381:241-248 (1998)
	C22	Kanagasundaram et al., "Isolation and Characterization of the Gene Encoding Gluconolactonase from <i>Zymomonas mobilis</i> ," <i>Biochimica et Biophysica Acta</i> 1171:198-200 (1992)

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